



<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)		Application No.	10/650,543
		Filing Date	August 28, 2003
		First Named Inventor	Rajiv Ramaswami
		Art Unit	2633
		Examiner Name	Unassigned
Total Number of Pages in This Submission	14	Attorney Docket Number	3239P081D3

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment / Response  <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input checked="" type="checkbox"/> Information Disclosure Statement  <input checked="" type="checkbox"/> PTO/SB/08  <input type="checkbox"/> Certified Copy of Priority Document(s)  <input type="checkbox"/> Response to Missing Parts/Incomplete Application  <input type="checkbox"/> Basic Filing Fee <input type="checkbox"/> Declaration/POA  <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition  <input type="checkbox"/> Petition to Convert a Provisional Application  <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input type="checkbox"/> Other Enclosure(s) (please identify below): <div style="border: 1px solid black; height: 80px; width: 100%;"></div>
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	William E. Alford, Reg. No. 37,764 <b>BLAKELY, SOKOLOFF, TAYLOR &amp; ZAFMAN LLP</b>
Signature	
Date	February 18, 2004

CERTIFICATE OF MAILING/TRANSMISSION			
I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.			
Typed or printed name	Susan McFarlane		
Signature		Date	February 18, 2004



# FEE TRANSMITTAL for FY 2004

Effective 01/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT

(\$)

## Complete if Known

Application Number 10/650,543  
Filing Date August 28, 2003  
First Named Inventor Rajiv Ramaswami  
Examiner Name Unassigned  
Art Unit 2633  
Attorney Docket No. 3239P081D3

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None  
☒ Deposit Account

Deposit  
Account  
Number

02-2666

Deposit  
Account  
Name

Blakely, Sokoloff, Taylor & Zafman LLP

The Commissioner is authorized to: (check all that apply)

- ☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) or underpayment of fees as required under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.  
☒ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$)

### 2. EXTRA CLAIM FEES

Total Claims  - 20\*\* =  X  =   
Independent Claims  - 3 =  X  =   
Multiple Dependent  =

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	86	2201	43	Independent claims in excess of 3	
1203	290	2203	145	Multiple Dependent claim, if not paid	
1204	86	2204	43	**Reissue independent claims over original patent	
1205	18	2205	9	**Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					(\$)

\*\*or number previously paid, if greater, For Reissues, see below

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
2053	130	2053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920 *	1804	920 *	Requesting publication of SIR prior to Examiner action	
1805	1,840 *	1805	1,840 *	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	1,210	2255	605	Extension for reply within fifth month	
1404	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	2451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	2460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	1809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	
Other fee (specify)					
SUBTOTAL (3)					(\$)

\* Reduced by Basic Filing Fee Paid

## SUBMITTED BY

## Complete (if applicable)

Name (Print/Type) William E. Aford  
Registration No. (Attorney/Agent) 37,764  
Telephone (714) 557-3800  
Signature   
Date 02/18/04



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

RAJIV RAMASWAMI, ET AL.

Application No.: 10/650,543

Filed: August 28, 2003

For: **METHOD AND APPARATUS FOR  
OPTICAL TO ELECTRICAL TO  
OPTICAL CONVERSION IN AN  
OPTICAL CROSS-CONNECT SWITCH**

Art Group: 2633

Examiner: Unassigned

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In accordance with the duty of disclosure, enclosed is a copy of Information Disclosure Statement by Applicant (form PTO/SB/08), which is being submitted before the mailing of a first Office Action. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s). Some or all of the references listed on the enclosed PTO/SB/08 were previously identified in the parent application (Application No. 09/704,439, filed November 1, 2000) and copies of the references were furnished at that time. Accordingly, per 37 CFR §1.98(d)(1) additional copies of those references are not submitted herewith.

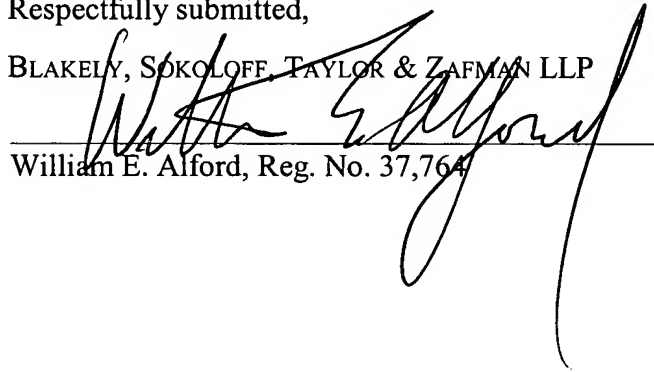
The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

Please charge any fees due to Deposit Account 02-2666. A duplicate copy of the Fee Transmittal (PTO/SB/17) is enclosed for this purpose.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: February 18, 2004

  
\_\_\_\_\_  
William E. Alford, Reg. No. 37,764

12400 Wilshire Boulevard, 7th Floor  
Los Angeles, CA 90025  
Telephone: (714) 557-3800

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*Susan McFarlane* 02-18-04  
*Susan McFarlane* *Date*

FEB 23 2004

Substitute for Form 1449A/PTO (Modified)

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/650,543
Filing Date	08/28/2003
First Named Inventor:	Rajiv Ramaswami
Group Art Unit	2633
Examiner Name	Unassigned
Attorney Docket Number	3239P081D3

Sheet 1 of 9

## U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Issue/ Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code <sup>2</sup>	Kind (If known)			
		3,651,392		Frisch, et al.	3/21/1972	
		4,365,863		Broussaud	12/28/1982	
		4,369,523		Seki, et al.	1/18/1983	
		4,437,190		Rozenwaig, et al.	3/13/1984	
		4,470,154		Yano	9/4/1984	
		4,519,670		Spinner, et al.	5/28/1985	
		4,530,566		Smith, et al.	7/23/1985	
		4,563,774		Gloge	1/7/1986	
		4,580,873		Levinson	4/8/1986	
		4,612,670		Henderson	5/16/1986	
		4,634,239		Buhrer	10/6/1987	
		4,797,879		Habbab, et al.	1/10/1989	
		4,817,014		Schneider, et al.	3/28/1989	
		4,843,382		Oda, et al.	6/27/1989	
		4,856,863		Sampsell, et al.	8/15/1989	
		4,859,012		Chon	8/22/1989	
		4,886,335		Yanagawa, et al.	12/12/1989	
		4,897,830		Hill, et al.	1/30/1990	
		4,903,225		Brost	2/20/1990	
		4,982,446		Lord, et al.	1/1/1991	

## FOREIGN PATENT DOCUMENTS

Exam. Initial*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				
		WO	86/04205		PCT	07/17/86		
		WO	86/05649		PCT	09/25/86		
		WO	90/14734		PCT	11/29/90		
		WO	91/01603		PCT	02/07/91		
		WO	95/19689		PCT	07/20/95		
		EP	0 674 457	A2	Fujitsu	09/27/95		
		EP	0 721 275	A2	EPO	12/28/95		

Examiner  
Signature

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<b>Substitute for Form 1449A/PTO (Modified)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/650,543
				Filing Date	08/28/2003
				First Named Inventor:	Rajiv Ramaswami
				Group Art Unit	2633
				Examiner Name	Unassigned
Sheet	2	of	9	Attorney Docket Number	3239P081D3

U.S. PATENT DOCUMENTS						
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		Number Code <sup>2</sup>	Kind (If known)			
		4,984,238		Watanabe, et al.	1/8/1991	
		5,035,482		ten Berge, et al.	7/30/1991	
		5,037,173		Sampsel, et al.	8/6/1991	
		5,157,652		Walker	10/20/1992	
		5,216,729		Berger, et al.	6/1/1993	
		5,253,274		Janniello, et al.	10/12/1993	
		5,260,819		Hadifotiou, et al.	11/9/1993	
		5,272,556		Faulkner, et al.	12/21/1993	
		5,299,044		Mosch, et al.	3/29/1994	
		5,349,550		Gage	9/20/1994	
		5,355,238		Kight, et al.	10/11/1994	
		5,359,683		Pan	10/25/1994	
		5,440,654		Lambert, Jr.	8/8/1995	
		5,477,364		Pearson	12/19/1995	
		5,485,300		Daley	1/16/1996	
		5,487,120		Choy, et al.	1/23/1996	
		5,488,862		Neukermans, et al.	2/6/1996	
		5,515,361		Li, et al.	5/7/1996	
		5,521,732		Nishio	5/28/1996	
		5,521,734		Frigo	5/28/1996	

FOREIGN PATENT DOCUMENTS								
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				
		EP	0 752 794	A2	EPO	01/08/97		
		EP	0 759 681	A2	EPO	02/26/97		
		EP	0 809 384	A2	EPO	05/20/97		
		WO	97/24822		PCT	07/10/97		
		EP	0 857 000	A2	EPO	01/30/98		
		EP	0 647 457	A3	Fujitsu	05/13/98		
		WO	98/54863		PCT	05/27/98		

Examiner Signature		Date Considered	
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Substitute for Form 1449A/PTO (Modified)  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/650,543
				Filing Date	08/28/2003
				First Named Inventor:	Rajiv Ramaswami
				Group Art Unit	2633
				Examiner Name	Unassigned
Sheet	3	of	9	Attorney Docket Number	3239P081D3

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		Number Code <sup>2</sup>	Kind (If known)			
		5,524,153		Laor	6/4/1996	
		5,535,293		Buchin	7/9/1996	
		5,539,328		Mirov, et al.	7/23/1996	
		5,570,371		Iga	10/29/1996	
		5,608,735		McCullough, et al.	3/4/1997	
		5,629,790		Neukermans, et al.	5/13/1997	
		5,629,919		Hayashi, et al.	5/13/1997	
		5,648,618		Neukermans, et al.	7/15/1997	
		5,666,487		Goodman, et al.	9/9/1997	
		5,694,389		Seki, et al.	12/2/1997	
		5,699,463		Yang, et al.	12/16/1997	
		5,719,903		Hiben, et al.	2/17/1998	
		5,727,098		Jacobson	3/10/1998	
		5,729,527		Gerstel, et al.	3/17/1998	
		5,745,274		Fatehi, et al.	4/28/1998	
		5,774,604		McDonald	6/30/1998	
		5,781,537		Ramaswami, et al.	7/14/1998	
		5,793,746		Gerstel, et al.	8/11/1998	
		5,801,863		Fatehi, et al.	9/1/1998	
		5,825,877		Dan, et al.	10/20/1998	

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				
		EP	0 849 906	A2	Fujitsu	06/24/98		
		EP	0 898 440	A2	EPO	02/24/99		
		GB	2347570	A	United Kingdom	03/03/99		
		WO	99/13656		PCT	03/18/99		
		WO	99/18751		PCT	04/15/99		
		EP	0 910 138	A1	EPO	04/21/99		
		EP	0 932 069	A1	EPO	07/28/99		

Examiner Signature	Date Considered
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		Number Code <sup>2</sup>	Kind (If known)			
		5,825,949		Choy, et al.	10/20/1998	
		5,828,476		Bonebright, et al.	10/27/1998	
		5,864,643		Pan	1/26/1999	
		5,867,289		Gerstel, et al.	2/2/1999	
		5,892,606		Fatehi, et al.	4/6/1999	
		5,900,968		Srivastava, et al.	5/4/1999	
		5,903,687		Young, et al.	5/11/1999	
		5,915,063		Colbourne, et al.	6/22/1999	
		5,942,937		Bell	8/24/1999	
		5,960,132		Lin	9/28/1999	
		5,963,350		Hill	10/5/1999	
		5,970,201		Anthony, et al.	10/19/1999	
		5,978,113		Kight	11/2/1999	
		6,002,818		Fatehi, et al.	12/14/1999	
		6,002,818		Fatehi, et al.	12/14/1999	
		6,005,993		MacDonald	12/21/1999	
		6,005,993		MacDonald	12/21/1999	
		6,008,915		Zyskind	12/28/1999	
		6,009,220		Chan, et al.	12/28/1999	
		6,046,833		Sharma, et al.	4/4/2000	

FOREIGN PATENT DOCUMENTS								
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				
		WO	99/40738		Tol Johannes Jacobus Gerardus	08/12/99		
		EP	0 938 244	A2	Fujitsu	08/25/99		
		WO	00/13210		PCT	09/09/99		
		WO	99/48323		PCT	09/23/99		
		EP	0 953 854	A1	EPO	11/03/99		
		WO	99/59272		PCT	11/18/99		
		WO	99/63374		Laor	12/09/99		

Examiner Signature		Date Considered	
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				Application Number	10/650,543
				Filing Date	08/28/2003
				First Named Inventor:	Rajiv Ramaswami
				Group Art Unit	2633
				Examiner Name	Unassigned
Sheet	5	of	9	Attorney Docket Number	3239P081D3

U.S. PATENT DOCUMENTS						
Exam. Initial*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Issue/ Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Code <sup>2</sup>	Kind (If known)			
		6,047,331		Medard, et al.	4/4/2000	
		6,069,924		Sudo, et al.	5/30/2000	
		6,072,612		Liou, et al.	6/6/2000	
		6,081,361		Adams, et al.	2/27/2000	
		6,097,858		Laor	8/1/2000	
		6,097,859		Solgaard, et al.	8/1/2000	
		6,108,311		Ramaswami, et al.	8/22/2000	
		6,130,876		Chaudhuri	10/10/2000	
		6,147,968		DeMoer, et al.	11/14/2000	
		6,148,124		Aksyuk, et al.	11/14/2000	
		6,160,821		Dolle, et al.	12/12/2000	
		6,188,810	B1	Baney	2/13/2001	
		6,188,814	B1	Bhalla	2/13/2001	
		6,192,172		Fatehi, et al.	2/20/2001	
		6,195,402	B1	Hiramatsu	2/27/2001	
		6,198,571	B1	Yank	3/6/2001	
		6,207,949	B1	Jackel	3/27/2001	
		6,222,954	B1	Riza	4/24/2001	
		6,252,689	B1	Sharp	6/26/2001	
		6,253,001	B1	Hoehn	6/26/2001	

FOREIGN PATENT DOCUMENTS								
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				
		WO	99/63531		Laor	12/09/99		
		WO	99/66354		Laor	12/23/99		
		WO	99/67666		Laor	12/29/99		
		WO	00/04671		Laor	01/27/00		
		WO	00/13210	A2	Xros, Inc.	03/09/00		
		WO	00/13210	A3	Xros, Inc.	03/09/00		
		WO	00/20899		PCT	04/13/00		

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(use as many sheets as necessary)

Sheet	6	of	9
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**Complete if Known**

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		WO	00/20899	A2	Xros, Inc.	04/13/00		
		WO	00/20899	A3	Xros, Inc.	04/13/00		
		EP	0 994 635	A1	EPO	04/19/00		
		WO	00/30282		PCT	05/25/00		
		EP	0 857 000	A3	Nippon Electric Co.	08/09/00		
		WO	00/52865		PCT	09/08/00		
		WO	00/07945		Nortel Networks Corp	02/01/01		

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OTHER ART – NO PATENT LITERATURE DOCUMENTS			
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		A. HIMENO, R. NAGASE, T. ITO, K.KATO AND M. OKUNO; Photonic Inter-Module Connector Using 8x8 Optical Switches for Near-Future Electronic Switching Systems; IEICE Transactions on Communications; E77-B (1994) February, No. 2, Tokyo, JP	
		LIN. L.Y. et al.; Micro-Electro-Mechanical Systems (MEMS) for WDM Optical-Crossconnect Networks, Milcom 1999; IEEE Military Communications Conf Proceedings; Atlantic City, NJ 10/31-11/3/99; pgs. 954-957.	
		S. OKAMOTO, et al.; Optical Path Cross-Connect Node Architectures for Photonic Transport Network, Journal of Lightwave Technology, Vol. 14, No. 6, June 1996, pgs. 1410-1422.	
		GUSTAFFSON, K. & HOK, B., A Batch-Processed Optical Scanner Proc. 12th Nordic Semiconductor Meeting, Jevnaker (Oslo: Center for Industrial Research) pp. 282-285, 1996.	
		GUSTAFFSON, K. & HOK, B., Fiberoptic Switching and Multiplexing with a Micromechanical Scanning Mirror, Digest of Technical Papers, 4th Int. Conf. On Solid State Sensors and Actuators (Tokyo: Institute of Electrical Engineers of Japan) pp. 212-215, 1985.	
		GUSTAFFSON, K. & HOK, B., A Silicon Light Modulator, Journal of Physics E. Scientific Instruments 21, pp. 608, 1998.	
		LIN L.Y., et al., Free-Space Micromachined Optical-Switching Technologies and Architectures, OFC/100C '00, February 21-26, 1999.	
		LAOR, H., et al., Performance of a 576x576 Optical Cross Connect, NFOEC-99.	
		Types and Characteristics of SDH Network Protection Architectures; ITU-T Recommendation G.841 10/98.	
		RAJIV RAMASWAMI & KUMAR SIVARAJAN, Optical Networks: A Practical Perspective, Morgan Kaufmann Pub. 1998, pp 152-161.	
		RAJIV RAMASWAMI & KUMAR SIVARAJAN, Optical Networks: A Practical Perspective, Morgan Kaufmann Pub. 1998, pp 423-462.	
		CHAD WHITE, The Photonic Switch Completes the Much-Vaunted All-Optical Network, Technology Investor, October 2000, pp 28-31.	

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		BISCHOFF, et al., Operation and Maintenance for an All-Optical Transport Network, IEEE Communications, Magazine, pp 136-142, 11/1996.			
		LIN. et al., Free-Space Micromachined Optical Switches with Submillisecond Switching Time for Large-Scale Optical Crossconnects, pp 525-527, 04/1998.			
		KAUFMAN, et al., The Optical Internet, A New Network Architecture, pp 1-13.			
		SIMON, et al., All Optical Regeneration, IEEE, pp 53-54.			
		PETER WONG & MARK YIN, An Economic Analysis for Core Optical Transport Networks.			
		CRAIG LABOVITZ, ABHA AHUJA, FARNAM JAHANAIAAN, Experimental Study of Internet Stability and Backbone Failures, IEEE, pp 278-285, 1999.			

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